Present vegetation on the older beds consists of cottonwood and natural and European black alder trees and wild carrot and sweetclover forbs. All of these have roots at a depth of more than 1 foot. Many kinds of grass and such trees as aspen and white birch have roots at a depth of less than 1 foot.

These areas may have future potential for such open-space uses as parks and golf courses. Part of the older waste-bed area adjacent to the New York State Fair Ground has been developed into a large parking area, which is mainly used at the time of the State Fair. Onsite investigation of areas is necessary to determine use and management needs. Not assigned to a capability unit or woodland suitability group.

Madrid Series

The Madrid series consists of deep, well-drained, moderately coarse textured and medium-textured soils. These soils formed in loamy glacial till fairly high in content of sand. They are on upland till plains and drumlins.

In a representative profile the surface layer is brown to dark-brown fine sandy loam 9 inches thick. Between depths of 9 and 19 inches, the upper part of the subsoil is brown and reddish-brown, friable fine sandy loam. Between depths of 19 and 42 inches, the subsoil is firm, reddish-brown, slightly heavier fine sandy loam. At a depth of 42 inches, the till substratum is reddish-brown to weak-red, firm fine sandy loam. A few gravelly and cobbly fragments are scattered throughout the profile.

Normally the water table in Madrid soils is at a depth of more than 36 inches, but in places it is at a depth of about 36 inches for short periods in spring and during wet periods. It is perched on the moderately slowly permeable or slowly permeable substratum. Roots of deep-rooted plants penetrate readily, but the main rooting zone is in the upper 30 to 40 inches. This zone has moderate to high available water capacity. Plants begin to show signs of wilting after 10 to 15 rainless days. Madrid soils are early to warm up. Their capacity to supply phosphorus is medium, and to supply potassium and nitrogen, low to medium. Most areas need lime. Crops respond very well to fertilization. Madrid soils are among the best soils in the county for many crops, including vegetables. They have few limitations for many nonfarm uses.

Representative profile of Madrid fine sandy loam, 2 to 8 percent slopes, in a grass meadow in the town of Van Bur[illegible] south of Conners Road, 1,350 feet east of the intersection of Kingdom Road:

Ap—0 to 9 inches, brown to dark-brown (7.5YR 4/2) fine sandy loam; weak, fine and medium, granular structure; very friable; many fine pores; many roots; 5 percent gravel; neutral; abrupt, wavy boundary.

B1—9 to 19 inches, brown (7.5YR 5/4) fine sandy loam, grading with increasing depth to reddish brown (5YR 5/4); weak, fine and medium, granular structure; friable; many fine pores; common roots; 5 percent gravel; neutral; clear, wavy boundary.

B&A'2—19 to 23 inches, reddish-brown (5YR 5/3) fine sandy loam; weak, fine and medium, subangular blocky structure; friable; surrounding areas of slightly darker, reddish-brown (5YR 4/3), slightly heavy fine sandy loam weak, medium and coarse, subangular blocky structure and 1/10- to 1/8-inch-thick coats of pinkish-gray (7.5YR 7/2) fine sandy lo[illegible] faces; firm; few fine pores; few roots[illegible] gravel, few cobbles; medium acid; clear, w[illegible]ary.

B2t—23 to 42 inches, reddish-brown (2.5YR 4/4) loam; weak to moderate, coarse, ang[illegible] structure; firm; thin patchy clay films o[illegible] many pores; nearly continuous clay linin[illegible] pores; few roots; many black nodules of[illegible] or roots; 5 percent coarse fragments weathered or partly weathered gravel a[illegible] slightly acid; gradual, wavy boundary.

C—42 to 74 inches, reddish-brown (2.5YR 4/4) t[illegible] (2.5YR 4/2) heavy fine sandy loam; weak, structure with thin, patchy clay films on firm; common pores; thin, discontinuous [illegible] in larger pores; very few roots; some bodies of sandy clay loam as much as 4 i[illegible] and 2 to 3 feet long; 5 percent coarse common, weathered or partly weathered cobbles; common black nodules; neutra[illegible] part, moderately alkaline (calcareous) at 70 inches.

The solum ranges from 36 to 60 inches in thickr[illegible] to carbonates ranges from 36 to 84 inches. Depth t[illegible] more than 40 inches and generally is more th[illegible] Content of coarse fragments ranges from 5 to 25 the solum below a depth of 10 inches. In places t[illegible] inches of the solum is stone free. Content of coarse ranges from 5 to 35 percent in the C horizon.

The Ap horizon ranges from dark brown to grayish brown. It has hues of 7.5YR to 2.5Y, valu[illegible] and chromas of 2 and 3. Texture of the fine-ear[illegible] ranges from fine sandy loam to loam. In undistu[illegible] the A1 horizon ranges from 3 to 8 inches in thick[illegible] very dark brown and brown to dark grayish bro[illegible] hues of 7.5YR to 2.5Y, values of 2 to 4, and chromas The A2 horizon, where present, has hues of 5Y values of 4 to 6, and chromas of 3 and 4. Texture [illegible] earth fraction ranges from fine sandy loam to lig[illegible] unlimed areas reaction in the A horizons ra[illegible] strongly acid to neutral.

The A horizon distinctly interfingers into the[illegible] resulting in A&B and B&A horizons. In this inte[illegible] zone, washed sand grains that have values of 6 chromas of 1 and 2 coat the B-horizon material.

The Bt horizon has hues of 2.5YR, value of 4 [illegible] chromas of 3 and 4. Texture of the fine-earth fract[illegible] from fine sandy loam to light loam. Reaction in the ranges from medium acid to neutral.

The C horizon ranges from weak red to dark gra[illegible] in hues of 2.5YR to 2.5Y. Texture of the fine-earth fine sandy loam or loam. Reaction in the C horiz[illegible] from slightly acid to calcareous in the upper p[illegible] always calcareous below a depth of 84 inches.

Madrid soils are closely associated with the mode[illegible] drained Bombay and Hilton soils and the somew[illegible] drained Appleton soils. All formed in similar mate[illegible]

Madrid fine sandy loam, 2 to 8 percen[illegible] (MdB).—This gently sloping or gently indula[illegible] is on t[illegible] here it receives little or n[illegible] from adjacent higher lying soils. The slopes vex in shape. Areas of this soil range from large in size, and some areas are larger t[illegible] acres. This soil has the profile described as re[illegible] ative of the series.

Included with this soil in mapping are sm[illegible] of Hilton soils and Bombay soils in shallow sions or drainageways. These wetter soils ma[illegible] much as 10 percent of some areas, and th[illegible] tillage in spring. Also included are a few sm[illegible] of Howard soils in small outwash deposits.

This soil is suited to crops, pasture, and tr[illegible] suited to most crops commonly grown in the including vegetables. Crops respond to man[illegible]

REFERENCE 33

STATE OF NEW YORK

OFFICIAL COMPILATION

OF

CODES, RULES AND REGULATIONS

MARIO M. CUOMO
Governor

GAIL S. SHAFFER
Secretary of State

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Published by
DEPARTMENT OF STATE
162 Washington Avenue
Albany, New York 12231

1/83

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REFERENCE 34

... COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
PO BOX 190
4894 ONONDAGA ROAD
SYRACUSE, NEW YORK 13215-0190

TELEPHONE (315) 469-6955
435-6600

Chad Eich
Enclosed are the pages from the County report concerning Salina landfill + Brighton Landfill.

M: Lisa A. Letteney
Public Health Engineer II
Environmental Risk Assessment

recycled paper

ing prior to 1/63. Finished approximately
Taken over by Town of Manlius sometime in
1960's. Municipal and commercial wastes.

oad and Matthews Avenue - Started operating ?
being operated. Demolition, residential
such as furniture, tires, etc., are deposited
t present time.

Street - Started sometime in 1930's.
approximately 1945.

s Avenue and Driscoll - Started sometime in
. Closed approximately 1945.

na Boulevard - Both sides from North Salina
e Boulevard West. Development: Industrial
mmercial area. Both City and public dumped

brook Drive - 900, 1000, 1100 Blocks.
pment: Residential housing area. Both City
blic dumped here.

len Avenue - from S. Salina to Midland Ave.
ment: Residential housing and church. City
umped here.

Tract - 600 block Cannon Street. Development: Residential housing. City only dumped here.

5. East Brighton Ave. - Brighton Landfill. Development: Super highway. Both City and public dumped here. Started sometime around 1943. Discontinued as a landfill on Feb. 5, 1964. This site was then used as a brush burning and diseased elm burning site. According to files, this site never stopped dumping and was a smoke problem for years. Dump taken over by O.C.S.W.D.A. 11/10/71, completed 1977. Area covered with approximately a 10-40 ft. depth of dirt. Brighton Towers built adjacent to site.

6. Salina St. South - W. Seneca Turnpike to Clary Jr. High School. Development: Jr. High School, swimming pool, residential. City only dumped here.

7. Dorwin Avenue - Salina to Valley Drive. Development: farm for growing crops. City only dumped here. Completed sometime around 2/64.

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US0340

TOWN OF GEDDES	1. West Onondaga Boulevard - Discontinued prior to 1964. Cooks Shopping Center built on site. Municipal, demolition, and commercial wastes.
	2. Lakeland Dump behind Val's Motors. Municipal and commercial wastes.
TOWN OF LAFAYETTE	Groff Road - Operating 1960. Present site. Municipal, commercial, and agricultural wastes.
TOWN OF LYSANDER	County Line Road has been operating prior to 7/63. Present site. Municipal, commercial, industrial, and agricultural wastes.
TOWN OF MANLIUS	Bowman Road - Started sometime in 1954, present facility. Commercial, municipal, and light industrial wastes.
TOWN OF MARCELLUS	Lee Mulroy Road Site - Village started operating in 1949. Town took over on January 15, 1965. Closed 8/16/76. Municipal, commercial, agricultural, and light industrial wastes.
TOWN OF ONONDAGA	Hogsback and Bailer Road - Operated prior to 1963. Closed around June 1, 1964. Municipal, agricultural, and junk car wastes.
TOWN OF OTISCO	1. Wrights Road Dump - Started prior to 7/63. Closed 6/70. Municipal and agricultural wastes.
	2. Canty Hill Road Dump - Started 6/70. Present site. Municipal and agricultural wastes.
TOWN OF POMPEY	No. 4 Road Site - Operating prior to 1952. Present site. Municipal, commercial, and agricultural wastes.
TOWN OF SALINA	Route 11 - Started prior to 1956. Sludge from Ley Creek Treatment Plant was once incorporated as cover material. Site closed to dumping 12/31/74. Final cover, as of May 2, 1977, still needed to be added. Type of material dumped at site - besides household refuse, iron, tin, foundry wastes, plastics, fly ash, and commercial wastes.
TOWN OF SKANEATELES	1. Gully Road Site - Opened 1932. Closed 1972. Municipal, commercial, industrial, and agricultural wastes.
	2. Old Seneca Turnpike Site - Opened 7/25/72. Incinerator put into operation sometime in early 1973. Present site. Municipal, commercial, industrial, and agricultural wastes.

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REFERENCE 35

A-181

Newcomb's Wildflower Guide

An Ingenious New Key System for Quick, Positive Field Identification of the Wildflowers, Flowering Shrubs and Vines of Northeastern and North-central North America

LAWRENCE NEWCOMB

Illustrated by Gordon Morrison

Foreword by Roland C. Clement
Vice President, National Audubon Society

A-182

Little, Brown and Company—Boston–Toronto–London

Larger Leaves Lance-shaped or Wider (2–6 Times Longer Than Wide), Obscurely Toothed or Entire, Not Both Heart-shaped and Long-Stalked (cont.)

LEAVES NOT OBVIOUSLY CLASPING THE STEM

1. FLOWERS WHITE OR FAINTLY TINGED WITH VIOLET

Flat-topped Aster (*A. umbellatus*) Flower heads ½–¾" wide, in a flattish cluster; grows in moist places; rays 7–15. Leaves lance-shaped or elliptical. 2–8' high. Moist thickets and borders of swamps.

Cornel-leaved Aster (*A. infirmus*) Flower heads about 1" wide; grows in dry woods and on slopes; rays 7–12. Leaves egg-shaped or elliptical, entire, the lower leaves smaller than the middle leaves. 1½–3' high. Mass. to Ohio south, mostly inland.

Panicled Aster (*A. simplex*) Flower heads ¾–1" wide; rays 20–40; 2–6' high. See p. 456.

Calico or Starved Aster (*A. lateriflorus*) Flower heads ¼–½" wide, with 9–15 rays. See p. 456.

2. FLOWERS VIOLET, LILAC OR PURPLE

Showy Aster (*A. spectabilis*) Showy, bright-violet flowers; heads 1–1½" wide; grows in dry sandy soil. Basal leaves long-stalked, lance-shaped or narrowly egg-shaped, obscurely toothed or entire, 3–5" long. Bracts of flower head usually spreading. 1–2' high. E. Mass. south along the coast.

Eastern Silvery Aster (*A. concolor*) Lilac flowers; heads about ¾" wide, in a long raceme, sometimes with a few short branches. Leaves oblong, 1½–2" long, silky-hairy on both sides. Sandy soil along the coast, s. Mass. south.

Bog Aster (*A. nemoralis*) Light violet-purple flowers; heads 1–1½" wide; bogs and shores. See p. 460.

REFERENCE 36

A-183

EPA-600
X-87-121

PB89-132112

HEALTH AND ENVIRONMENTAL EFFECTS PROFILE FOR PHENOL

(U.S.) Environmental Protection Agency
Cincinnati, OH

Feb 87

U.S. DEPARTMENT
National Technical

A-184

...tion is not likely. The solubility of phenol in water is high enough to permit significant removal of this chemical from air through wet deposition.

In summary, in a polluted atmosphere that contains NO_x at a concentration ≥20 ppb (Carter et al., 1981), phenol will be removed from the atmosphere with a half-life of <1 hour through its reaction with NO_3 radicals. In the absence of a significant NO_x concentration, phenol will be removed from the atmosphere with a half-life of ~0.5 day through its reaction with OH radicals. Some phenol is likely to be removed through wet precipitation, although no quantitative value for this removal rate can be given.

2.2. WATER

The two sources of phenol occurring naturally in aquatic media are animal wastes and decomposition of organic wastes (U.S. EPA, 1981). The anthropogenic sources of phenol are coal tar (Thurman, 1982) and wastewater from manufacturing industries such as resins, plastics, fibers, adhesives, iron and steel, aluminum, leather and rubber (U.S. EPA, 1981). Effluents from synthetic fuel manufacturing processes are also anthropogenic sources of phenol (Parkhurst et al., 1979).

The data regarding the fate of phenol in aquatic media are relatively more abundant. The three most likely chemical processes of phenol in aquatic media are its interaction with peroxy radicals ($RO_2\cdot$), hydroxyl radicals ($OH\cdot$) and singlet oxygen ($^1O_2$). The rate constants for these three respective reactions are 10^7 M^{-1} hr^{-1}, 3.24×10^{13} M^{-1} hr^{-1}, and $<7\times10^5$ M^{-1} hr^{-1} (Mabey et al., 1981; Neta and Schuler, 1975). If the concentrations of $RO_2\cdot$, $OH\cdot$ and $^1O_2$ in natural aquatic media are assumed to be 10^{-9}, 10^{-17} and 10^{-12} M, respectively (Mill et al.,

REFERENCE 37

General Motors Corporation
Legal Staff

Facsimile 313-974-7770

Telephone 313-974-1963

EXPRESS MAIL

July 17, 1992

Mr. Chad Eich
Ecology and Environment Engineering, P.C.
Buffalo Corporate Center
368 Pleasantview Drive
Lancaster, New York 14086

Dear Mr. Eich:

RE: Buffing Sludge and Fly Ash Process Generation and Composition

Pursuant to your letter of June 26, 1992, I contacted our Inland Fisher Guide plant in Syracuse, New York. Buffing sludge was generated as follows:

1. Until 1973, an activity at the plant was the fabrication of wheel discs and hubcaps. After the discs and hubcaps were formed in the press line and heat treated as required, they were buffed using cloth buffing wheels. A buffing compound was used during the process. The sludge was formed from the excess buffing compound which built up on and under the buffing units. The buffing wheels were made of cloth and as they wore down, the fibers became part of the sludge. In addition, some automatic buffing units had water wash centerspray units which scrubbed the exhaust air. Periodically, the water was drained and the remaining sludge was disposed of as buffing sludge.

2. Until 1971-72, the plant had a die casting process. As with the wheel disc line, these parts were buffed in a similar manner and sludge generated.

3. For approximately 2 years around 1959, an extruding process was used for aluminum moldings which were also buffed creating a sludge.

No records have been found which note the types or makeup of the buffing compounds. Wheel discs and hubcaps were made of stainless steel, steel and brass. Zinc was used in the die casting process.

recycled paper New Center One Building 3031 West Grand Boulevard P.O. Box 33122 Detroit, Michigan 48232

Fly ash was generated at the Powerhouse from the combustion of coal in boilers used to produce steam. Analysis reports from the relevant time for the Salina Town Landfill and Brighton Landfill no longer exist. Attached is an analysis report from 1986 which should be considered typical.

If I can be of any further assistance, please contact me.

Very truly yours,

Linda L. Bentley

Linda L. Bentley
Legal Assistant

enclosure

c: D. A. Schiemann, Esq.
W. Kochem